

Annual Joint
Report on
Pre-Kindergarten
through Higher
Education
in Tennessee

January 31, 2011

Education in Tennessee

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Joint Report on Pre-Kindergarten through Higher Education in Tennessee January 2011 Report

The Annual Joint Report on Pre-Kindergarten through Higher Education in Tennessee complies with the requirements established in T.C.A. §49-1-302(a)(10). The act directs the State Board of Education and the Tennessee Higher Education Commission to provide a report to the Governor and General Assembly, all public schools, and institutions of higher learning and their respective boards. This report is to include, but is not limited to, a discussion of the following four areas:

- The extent of duplication in elementary, secondary and postsecondary education;
- The extent of compatibility in high school graduation requirements and admission requirements of postsecondary institutions;
- The extent to which respective master plans of the board and the higher education commission are being fulfilled; and
- The extent to which state needs in public education are being met as determined by such board and commission.

This year's joint report marks the beginning of a new era for education in Tennessee. In response to the special session of the 106th General Assembly, landmark legislation was passed, including First to the Top and the Complete College Tennessee Act. Each is focused on raising the level of statewide accountability and support in K-12 schools and institutions of higher education.

Taken together, this work provides the framework for collaboration between all state systems of education, addressing the overarching need to produce a higher proportion of college- and career-ready graduates. Tennessee will use this framework to make significant progress toward increasing postsecondary educational attainment to the national average by 2025.¹

The extent of duplication in elementary, secondary, and postsecondary education:

Both the Board and the Commission have developed master plans^{2,3} to guide policy development and resource allocation in public education. The plans, while comprehensive, have sharpened the focus of standards requiring progressive student achievement from pre-kindergarten through higher education and have minimized duplication. The elementary and secondary curriculum standards have been rewritten to meet Achieve's American Diploma Project learning outcomes and to address the ACT Benchmarks for Success (Mathematics 22; English 19; Science 24; Reading 21).

¹ This goal, which aims to increase the number of Tennessee adults with an associate's degree or higher to the national average, requires that cumulative degree production is increased by 26,000 new degrees by 2015 and 210,000 by 2025.

² State Board of Education Master Plan, FY 2008-2012, http://tn.gov/sbe/masterplan.htm

³ The Public Agenda for Tennessee Higher Education 2010-2015,

http://www.tn.gov/thec/Divisions/Commission/commissionmeetings/Archives/2010/summer/I.A.1.%2 0Attachment%20-%20Master%20Plan.pdf

As one of only two states to receive the first round of funding in the federal Race to the Top competition, Tennessee's key initiatives reflect a high degree of collaboration between elementary, secondary, and postsecondary education. Such collaboration works in support of eliminating the potential duplication of efforts across the P-20 education pipeline.

With Tennessee's successful Race to the Top bid, higher education will have a significant role in achieving the overall goals of the federal school reform grant. Tennessee higher education produces the greatest percentage of K-12 teachers available for employment in Tennessee schools. Designed to improve student performance, THEC will assist DOE through the following projects: (1) Integrating Common Core Standards into Pre-Service; (2) Integrating Tennessee's Value Added Assessment System (TVAAS) into Pre-Service; (3) School Leaders Supply and Demand Study; (4) UTeach Program Replication; (5) Teacher Preparation Program Effectiveness Report Card; and, (6) STEM Professional Development.

As K-12 teachers are held accountable for understanding TVAAS, THEC is collaborating with teacher preparation programs in support of developing teachers that can use data to improve instruction. Further, Tennessee's statewide longitudinal data system (SLDS) is made possible by collaboration between the Department of Education, the higher education systems, and the Center for Business and Economic Research (UT, Knoxville). The SLDS is designed to incorporate data elements from K-12, postsecondary education, and other child-serving departments that will help facilitate more robust characterizations of health, social welfare and behavioral conditions that influence students' progress from earliest child care, though P-20, and into the workforce.

In regards to the Science, Technology, Engineering, and Mathematics (STEM) emphasis of First to the Top, training will be coordinated through the Department of Education and the networked Oak Ridge Associated Universities. Additionally, there will be an increase in the number of higher education partners focused on recruiting, training, and developing high quality math teachers through the SITES-M⁴ project and UTeach.⁵

Finally, several policies have been established to streamline and assist the successful transition from high school to college. Through the Tennessee Developmental Studies Redesign project, community colleges have transformed developmental math and English instructional delivery and curriculum using technology-supported, active-learning strategies. Similarly, the HOPE scholarship provides an opportunity for close to 14,000 high school students to earn college credit through the Dual Enrollment Grant. These policies, designed to facilitate student retention and success, have increased college readiness and removed barriers to a high-quality education.

⁴ (SITES-M) Strengthening Instruction in Tennessee Elementary Schools: Focus on Mathematics

⁵ Tennessee hosts four UTeach programs, traditional teacher preparation designed to increase the number of highly qualified STEM teachers.

The extent of compatibility in high school graduation requirements and admission requirements of postsecondary institutions:

The requirements for high school graduation are compatible with the admission requirements at Tennessee public universities, which are being revised to address the additional unit in mathematics and the prescribed science sequence of the new Tennessee high school single diploma core. In 2007, Tennessee joined the American Diploma Project (ADP) network. The ADP's four key priorities are to:

- Align high school standards with the demands of college and work;
- Require students to complete a college- and career-ready curriculum so that earning a diploma ensures that a student is ready for postsecondary opportunities;
- Build college- and career-ready measures into statewide high school assessment systems; and
- Hold high schools and postsecondary institutions accountable for student preparation and success.

Implementing these priorities resulted in revised high school graduation requirements beginning with the graduating class of 2013 and revised university admission requirements beginning in the fall of 2013. The alignment of high school exit and college entry curricula in math and English validates student advancement; higher education first-year courses build on and do not replicate instruction in high school. Tennessee high school graduation requirements are listed in **Appendix A**. Current high school course requirements for regular undergraduate admission in Tennessee public universities through Fall 2012 are listed in **Appendix B** and new requirements will be updated in Fall 2013.

The extent to which respective master plans of the board and the higher education commission are being fulfilled:

State Board of Education

The State Board of Education's vision is to prepare all Tennessee children for successful postsecondary work, education, and citizenship. The Board's Master Plan includes policy goals to ensure equal access to the education constitutionally guaranteed to all Tennessee children and necessary for the success of individual children, their communities, the State, and the nation. The goals embodied by the vision and the student outcomes used to measure progress toward those goals are built upon four foundational principles.

Foundational Principles

Focus on the following principles will make the Board's vision a reality for Tennessee children:

- Effective school leaders
- Effective teachers
- Rigorous, relevant curriculum
- Resources sufficient to achieve the vision

Goals

To achieve its vision, the Board has set the following goals:

- Successful transitions
- Rigorous, relevant high school
- Relevant middle grade experiences
- Dynamic elementary grade education
- High-quality Pre-K availability

Student Outcomes

To measure progress toward achieving these goals, the State Board relies on the following indicators:

- Remedial and developmental studies rate at Tennessee postsecondary institutions for recent high school graduates
- College-going rate
- Graduation rate
- ACT readiness subject-area benchmarks for college and workforce training: ACT (11th or 12th grade)
 ACT's PLAN (10th grade)
 ACT's EXPLORE (8th grade)
- 8th Grade NAEP
- 4th Grade NAEP

Higher Education

In January 2010, the General Assembly passed the Complete College Tennessee Act (CCTA), a comprehensive reform agenda that seeks to transform public higher education through changes in academic, fiscal and administrative policies at the state and institutional level. At the center of these reforms is the need for more Tennesseans to be better educated and trained, while also acknowledging the state's diminished fiscal capacity to support higher education.

Amongst other charges, the CCTA directed the Commission to develop a master plan that holds higher education accountable for increasing the educational attainment level of Tennesseans. As instructed by T.C.A. §49-7-202(c)(1) this plan must: (A) address the state's economic development, workforce development and research needs; (B) ensure increased degree production within the state's capacity to support higher education; and (C) use institutional mission differentiation to realize statewide efficiencies through institutional collaboration and minimized redundancy in degree offerings, instructional locations and competitive research. A conscious attempt has been made to substitute the language of "Public Agenda" for "Master Plan" in order to reflect the shared, collaborative process which is required to develop this public policy agenda. As a result, the 2010-15 higher education public agenda targets full implementation of the letter and spirit of the CCTA.

The overarching goal of the Public Agenda is to have Tennessee meet the projected national average in educational attainment by 2025. The primary state policy levers for addressing the state's educational needs include promoting: (1) productivity and efficiency through an outcomes-based funding formula; (2) quality assurance through revised performance funding standards; (3) economic and workforce development through responses to a study of labor market supply and demand; (4) efficiency and

effectiveness through purposeful reporting; (5) efficiencies through mission and sector differentiation; (6) efficiencies through inter-institutional collaboration and reduced duplication; and (7) efficiencies through incentives for extramural support.

2010-15 Public Agenda Policy	Status	
Outcomes Based Funding Formula	Approved for implementation AY 2011-12	
Performance Funding Standards	Approved for implementation AY 2010-11	
Study of Labor Market Supply & Demand	Forthcoming in January 2011 (CBER)	
Purposeful Reporting	On-going: Public Agenda Progress Report	
Institutional Mission Differentiation	Approved November 2010	
Collaboration and Reduced Duplication	On-going: Remedial or developmental course delivery reform; Universally transferable general education core; Low-producing program monitoring	
Incentives for Research Enhancement	On-going: UT-K/Oak Ridge National Laboratory collaboration and Memphis Research Consortium	

The extent to which state needs in public education are being met as determined by such board and commission:

In 2009, the State Board of Education and the Tennessee Higher Education Commission identified objectives for the state's education system that were critical to the future of all Tennesseans. These measures align with the College and Career Ready Policy Institute (CCRPI) benchmarks as adopted by the Board and the Commission.

As a participant in the CCRPI, Tennessee was one of eight states funded by the Gates Foundation, Achieve, and Education Trust to develop a P-16 policy framework to ensure that standards and student learning assessments meet state goals. The CCRPI helps states put elementary and secondary assessment and accountability systems in place that will ensure that all students graduate from high school college- and career-ready. These benchmarks outline skill levels necessary for student progression in elementary and secondary education and demonstrate the skill attainment necessary for entry into college or a career upon graduation from secondary education. Improved assessment and accountability ensure curriculum is not duplicated and students obtain the necessary skills before progressing. The following 15 indicators are categorized to follow a student's progression through K-12 and higher education.

- **School Readiness** (2): Designed to monitor and evaluate student preparation for academic success through elementary school testing.
- **Career- and College-Readiness** (9): Designed to monitor and evaluate middle and high school standardized assessments, high school graduation rates and academic preparation for postsecondary coursework.
- **Postsecondary Access and Success** (4): Designed to monitor and evaluate postsecondary student enrollment, retention and graduation rates.

In 2010, receipt of Race to the Top provided significant support to define ambitious and achievable academic targets for all students. These targets were established by

the Department of Education and are currently being reviewed for approval by the State Board of Education in order to complement key priorities for developing college-and career- ready graduates.

Tennessee College and Career Ready Goals and Indicators

School Readiness

1. The percentage of 3rd grade students (spring) who score at or above proficient on the TCAP reading/language arts assessment; and the percentage of 4th grade students (fall) who score at or above proficient on the NAEP reading assessment.

Indicator 1	Baseline 2009-10	Interim Target 2014-15	Target 2019-20
3 rd grade TCAP	42% proficient	60% proficient	75% proficient
4th grade NAEP	28% proficient	39% proficient	56% proficient

Source: Tennessee Department of Education

2. The percentage of 3^{rd} grade students (spring) who score at or above proficient on the TCAP mathematics assessment; and the percentage of 4^{th} grade students (fall) who score at or above proficient on the NAEP mathematics assessment.

Indicator 2	Baseline 2009-10	Interim Target 2014-15	Target 2019-20
3 rd grade TCAP	48% proficient	64% proficient	77% proficient
4th grade NAEP	29% proficient	42% proficient	60% proficient

Source: Tennessee Department of Education

College and Career Readiness

3. The percentage of 7th grade students (spring) who score at or above proficient on the TCAP reading/language arts assessment; and the percentage of 8th grade students (fall) who score at or above proficient on the NAEP reading assessment.

Indicator 3	Baseline 2009-10	Interim Target 2014-15	Target 2019-20
7 th grade TCAP	43% proficient	57% proficient	75% proficient
8th grade NAEP	28% proficient	38% proficient	55% proficient

Source: Tennessee Department of Education

4. The percentage of 7th grade students (spring) who score at or above proficient on the TCAP mathematics assessment; and the percentage of 8th grade students (fall) who score at or above proficient on the NAEP mathematics assessment.

Indicator 4	Baseline 2009-10	Interim Target 2014-15	Target 2019-20
7 th grade TCAP	29% proficient	51% proficient	70% proficient
8th grade NAEP	25% proficient	39% proficient	58% proficient

Source: Tennessee Department of Education

5. The percentage of 8th grade students (fall) who meet college-readiness benchmarks of the ACT EXPLORE assessment in English, reading, mathematics, and science.

Indicator 5	Baseline	Interim	Target
	2009-10	Target 2014-15	2019-20
EXPLORE	65% meeting	71% meeting	75% meeting
English	CCR benchmark	CCR benchmark	CCR benchmark
EXPLORE	45% meeting	61% meeting	75% meeting
Reading	CCR benchmark	CCR benchmark	CCR benchmark
EXPLORE	37% meeting	57% meeting	75% meeting
Math	CCR benchmark	CCR benchmark	CCR benchmark
EXPLORE	15% meeting	46% meeting	75% meeting
Science	CCR benchmark	CCR benchmark	CCR benchmark

Source: Tennessee Department of Education

6. The percentage of 10th grade students (spring) who meet college-readiness benchmarks of the ACT PLAN assessment in English, reading, mathematics, and science.

Indicator 6	Baseline	Interim	Target
	2009-10	Target 2014-15	2019-20
PLAN English	67% meeting CCR benchmark	74% meeting CCR benchmark	80% meeting CCR benchmark
PLAN Reading	41% meeting	61% meeting CCR	80% meeting CCR
	CCR benchmark	benchmark	benchmark
PLAN Math	26% meeting	64% meeting CCR	80% meeting CCR
	CCR benchmark	benchmark	benchmark
PLAN Science	16% meeting	49% meeting CCR	80% meeting CCR
	CCR benchmark	benchmark	benchmark

Source: Tennessee Department of Education

7. The percentage of students who score at or above proficient on the TCAP end of course assessment in English III.

Targets will be set after administration of the English III assessment.

8. The percentage of students who score at or above proficient on the TCAP end of course assessment in Algebra II.

Targets will be set after administration of the Algebra II assessment.

9. The percentage of high school graduates who meet ACT college-readiness benchmarks in English, reading, mathematics, and science.

Indicator 9	Baseline	Interim	Target
	2009-10	Target 2014-15	2019-20
ACT English	55% meeting	68% meeting	80% meeting
	CCR benchmark	CCR benchmark	CCR benchmark
ACT Reading	40% meeting	60% meeting	80% meeting
	CCR benchmark	CCR benchmark	CCR benchmark
ACT Math	24% meeting	52% meeting	80% meeting
	CCR benchmark	CCR benchmark	CCR benchmark
ACT Science	18% meeting	49% meeting	80% meeting
	CCR benchmark	CCR benchmark	CCR benchmark

Source: Tennessee Department of Education

10. The percentage of first-time 9th grade students who graduate on-time with a regular diploma (longitudinal cohort method)

Indicator 10	Baseline	Interim	Target
	2009-10	Target 2014-15	2019-20
Longitudinal cohort graduation rate	82% (estimate)	90%	92%

Source: Tennessee Department of Education

11. The percentage of recent public high school graduates enrolled in Tennessee public institutions only credit-bearing courses (no remedial or developmental courses).

Indicator 11	Baseline	Interim	Target
	Fall 2009	Target Fall 2014	Fall 2019
Percentage Non R&D	36.8%	52%	80%

Source: THEC Student Information System

Postsecondary Access and Success

12. The percentage of high school graduates who have attained postsecondary credit in Tennessee public institutions through dual enrollment, dual credit, or are eligible for credit through Advanced Placement exams.

Currently, public higher education institutions submit data to the THEC Student Information System (SIS) relative to credit through dual enrollment. Similarly, THEC SIS also contains data regarding AP credits. However, THEC SIS does not have data regarding dual credit or AP exams. The P-20 State Longitudinal Data System (SLDS), established by the First to the Top federal grant initiative, will serve as a repository for data elements from K-12 and higher education data systems, facilitating the analysis of student concurrent enrollment and accelerated credits. The SLDS is forthcoming; efforts to build the data system will begin Spring 2011

Recommendation: In order to successfully measure Advanced Placement exams and credits applied to postsecondary degree attainment, THEC should establish a data sharing contract with College Board, who administers these examinations.

13. The percentage of recent public high school graduates enrolled in postsecondary education.⁶

The targets set for this indicator are derived from the postsecondary-going rate projected by the Student Flow Model. For more information on the postsecondary-going rate, please see the Public Agenda Appendix C: THEC Student Flow Model, Table 1.7

Indicator 13	Baseline	Interim	Target
	Fall 2009	Target Fall 2014	Fall 2019
Recent grads attending HE	56.2%	62%	66%

Source: THEC Student Information System, TNDOE and National Student Clearinghouse.

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⁶ Postsecondary-going rates reflect only students who attended college in the immediate fall semester following high school graduation. The postsecondary-going rate includes all in-state and out-of-state institutions which participate in the National Student Clearinghouse, a non-profit organization which collects student enrollment information from more than 3,300 colleges, enrolling 92% of US college students.

⁷http://www.tn.gov/thec/Divisions/Commission/commissionmeetings/Archives/2010/summer/I.A.1.% 20Attachment%20-%20Master%20Plan.pdf

14. The percentage of recent public high school graduates who enroll in Tennessee public institutions, successfully complete 24 credit hours of postsecondary education within one academic year and return the subsequent fall semester.

The targets set for this indicator are derived from a compound annual retention rate of 3% projected by the Student Flow Model. For more information on the retention rate, please see the Public Agenda Appendix C: THEC Student Flow Model, Table 1.8

Indicator 14	Baseline	Interim	Target
	2009-10	Target 2014-15	2019-20
Complete 24 credit hours	55.2%	58%	61%

Source: THEC Student Information System

15. The percentage of first-time, full-time postsecondary students completing degrees within 150% of normal degree program time in Tennessee public institutions.

The targets set for this indicator are derived from a compound annual graduation rate of 4% projected by the Student Flow Model. For more information on the graduation rate, please see the Public Agenda Appendix C: THEC Student Flow Model, Table 1.8

COMMUNITY COLLEGE

3-Year Graduation Rate: Students who receive Associates degree.				
Indicator 15.1	Baseline 2009-10	Interim Target 2014-15	Target 2019-20	
Graduation Rate	15.5%	19%	22%	

Source: THEC Student Information System

6-Year Graduation Rate: Students who receive Associates and/or Bachelor.				
Indicator 15.2	Baseline 2009-10	Interim Target 2014-15	Target 2019-20	
Graduation Rate	30%	33%	36%	

UNIVERSITY

6-Year Graduation Rate: Students who receive Associates and/or Bachelor.

Indicator 15.3

Baseline Interim Target 2019-20

Graduation Rate

51%

55%

59%

Source: THEC Student Information System

 $^{^8}$ http://www.tn.gov/thec/Divisions/Commission/commissionmeetings/Archives/2010/summer/I.A.1.% 20Attachment%20-%20Master%20Plan.pdf

Appendix A: Tennessee High School Graduation Requirement

Current Basic High School Requirements	Requirements for Students Beginning High School in Fall 2009	
TOTAL CREDITS REQUIRED: 20	TOTAL CREDITS REQUIRED: 22	
MATH: 3 Credits Including either Geometry or Algebra II	MATH: 4 Credits Including Algebra I, II, Geometry and a fourth higher level math course	
SCIENCE: 3 Credits Including one physical science course and Biology	SCIENCE: 3 Credits Including Biology, Chemistry or Physics, and a third lab course	
ENGLISH: 4 Credits	ENGLISH: 4 Credits	
SOCIAL STUDIES: 3 Credits	SOCIAL STUDIES: 3 Credits	
WELLNESS: 1 Credit	PHYSICAL EDUCATION AND WELLNESS: 1.5 Credits	
ELECTIVE: 6 Credits	PERSONAL FINANCE: .5 Credits	
	FOREIGN LANGUAGE: 2 Credits FINE ARTS: 1 Credit May be waived for students not going to a University to expand the elective focus	
	ELECTIVE FOCUS: 3 Credits Math and Science, Career and Technical Education, Fine Arts, Humanities, Advanced Placement (AP) or International Baccalaureate (IB)	
	CAPSTONE EXPERIENCE: Requirements to be determined by local Board of Education	

Appendix B:

Minimum High School Course Requirements for Regular Undergraduate Admission to Tennessee Public Higher Education Institutions

Subject Area and Units High School Courses Fulfilling Requirements Fall 2010 through Fall 2012

1 m 2010 tm 0 un 2012				
English	Algebra I and II			
4 units required	2 units required			
English I, II, III, and IV	Algebra I and II			
Applied Communication substitutes for	Technical Algebra (Formerly known as			
English III or IV	Math for Technology II)			
Visual/ Performing Arts	Advanced Mathematics			
1 unit required	1 unit of geometry or an advanced			
Theatre Arts	course with geometry as			
Visual Arts	significant component required			
Music Theory	Technical Geometry			
Music History	Pre-Calculus			
Vocal Music	Calculus			
Instrumental Music	Probability and Statistics			
Art History	Math IV			
General Music	Trigonometry			
Foreign Language	Natural/ Physical Sciences			
2 units in same language required	2 units required one must be a laboratory			
Latin	course in biology, chemistry, or physics			
Spanish	Biology I and II			
French	Physical Science			
German	Chemistry I and II			
Russian	Physics Principle of Technology I			
Japanese	Ecology and Conservation of Natural			
	Resources			
U.S. History	Principles of Technology II Nutrition Science			
1 unit required	Physiology			
U.S. History	Biology for Technology			
Social Studies	Science 1-A (Ag Science)			
1 unit required	Geology			
World History	acology			
Ancient History				
Modern History				
World Geography				
European History				
Daropean instory				

Note: Admission requirements will be revised for Fall 2013